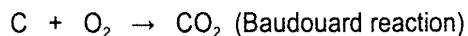


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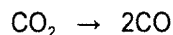
...makes it possible to obtain a coke..." The retaining threshold is depicted in Figure 1 and described on page 4 at lines 32 to 35 where the specification provides that the region 11 constitutes a retaining threshold for the waste and is a region of "high conicity resulting from the difference in diameter between the cylinder 9 and the truncated cone 10." Thus, the specification, in combination with Figure 1, clearly defines the structure of the retaining threshold.

This discontinuity of the chamber shape is reached after the pyrolysis of the refuse, which is reducing the volume of the load. This provides a layer of coke, which is essentially a mix of carbon and inert materials, formed by bringing the constituents of the load in intimate contact with themselves at the end of pyrolysis. This is accomplished in the retaining threshold as described on page 3, lines 20 to 28 of the specification as filed. The pyrolyzed waste material gathers at the end of the cylinder 9 and is held (retained) against the steep face of the high conicity of region 11. It is in this region that the waste is thoroughly mixed (brought into intimate contact with itself) as a consequence of the rotation of the apparatus. Then, when enough coke has gathered, it flows over the edge of region 11 into the cone. The carbon in the coke is subsequently burned in the cone, with a substoichiometric amount of air, so that a combustible gas is obtained. The latter then flows in the direction opposite the refuse flow thereby producing the necessary heat for the pyrolysis.

The following reactions take place in the conical part of the apparatus of the invention:



Followed by:



Thus, a gas rich in CO is formed, which may be incinerated in a specific chamber at 1200 °C.

The retaining threshold forms "a volume of coke in which the constituents are brought mutually into close contact while receiving a small amount of oxygen. At this instant, the reaction temperature of the waste rises to approximately 700 °C." (page 3, lines 29 to 34). It is in the retaining threshold where a sufficient volume of coke is formed in order to facilitate the above reactions in the conical part of the apparatus.

The Examiner asserts that Giraud discloses a "retaining threshold" as described in Figure 11 and in column 11, line 58 to column 12, line 20. Figure 11 of Giraud depicts the refuse forming a continuous layer from the cylindrical part (151) of the inlet until the end of the conical part (152). It is clear that there is no region of close intimate contact as described in the present invention. Rather, in Girard all the waste is incinerated in the conical part in an exothermal oxidation at high temperature (900 °C and 1800 °C; Claim 21; Figure 2 and within the table of column 7). This does not require the formation of a thick layer of coke as described in the present application on page 3, lines 29 to 38.

The Examiner referred to the embodiment of Giraud as described in column 11, line 58 to column 12, line 20. In that embodiment, the oscillating movement of the chamber is described in combination with the method of introducing combustion air into the chamber. This involves the specific shape of the refractory tiles 172 and 173 lining the inside of the chamber, and a screen 184 which is partially rotating along with the chamber, and which may allow more or less air to be introduced. In that description, the reference *d* refers to the mass of refuse lying on the chamber floor, and being transported by the oscillating movement from the inlet to the outlet. From the preceding analysis, it is clear that *d* cannot be regarded as a zone (region) where the waste material is in intimate contact as described in the presently claimed invention.

Applicant respectfully maintains that Giraud does not disclose a retaining threshold, and that the present invention is not anticipated by Giraud. Therefore, the Applicants respectfully request withdrawal of the rejection to Claims 2-4 under 35 U.S.C. § 102(b).

### **CONCLUSION**

In view of the foregoing remarks, Applicant respectfully asserts that the present application is fully in condition for allowance. If any issues remain that may be addressed by a phone conversation, the Examiner is invited to contact the undersigned at the phone number listed below.

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Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: Jan 11, 2002

By: Daniel Hart  
Daniel Hart  
Registration No. 40,637  
Attorney of Record  
620 Newport Center Drive  
Sixteenth Floor  
Newport Beach, CA 92660  
(619) 235-8550

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